UNIVERSITY OF MARYLAND SPORTS MEDICINE

Staph and MRSA in Athletics: Recognition and Prevention

What is "Staph" / MRSA?:

Staphylococcus aureus, often referred to as "**staph**", is a common type of bacteria that can live harmlessly on the skin or in the nose of 25 to 35 percent of healthy people (this is often referred to as being "colonized" with the germ). Occasionally, staph can cause an infection. Staph bacteria are one of the most common causes of skin infection in the United States, but most of these infections are minor, such as pimples or boils. Most of these infections can be treated without antibiotics, however, some staph infections can cause serious infections, such pneumonia, bloodstream, bone, and joint infections, and surgical wound infections.

In the past, most serious staph bacterial infections were treated with a certain type of antibiotic related to penicillin. In recent years, treatment of these infections has become more difficult because staph bacteria have become resistant to various antibiotics. These resistant bacteria are called **methicillin-resistant staphylococcus aureus (MRSA)**. According to the Centers for Disease Control (CDC) 1% of the population is colonised with MRSA. MRSA is one type of skin infection among several that are of concern in competitive sports.

Who Gets "Staph" / MRSA?:

"Staph" infections, including MRSA, have been traditionally associated with outbreaks in health-care facilities, but they are becoming increasingly common in student-athletes participating in close contact sports (e.g. football, wrestling, lacrosse, etc.), although anyone, including coaches, staff, etc. who come into contact with colonized individuals, can contract the infection. "Staph" and MRSA are spread either by direct physical contact or indirect touching of contaminated objects. This includes touching, using, and/or sharing sheets, towels, clothes, equipment, dressings, personal items, bar soap, etc. which have been used by someone who has "staph" and/or MRSA, along with poor hygiene habits (e.g. hand washing, showering, etc.)

What Does "Staph" / MRSA Look Like?

"Staph" and/or MRSA usually first presents as some type of skin or soft tissue infection such as pimples, abscesses, pustules, and/or boils (see pictures below). Some can be red, swollen, painful, and/or have pus or other drainage. The pustules may be confused with insect bites initially, and may also be associated with existing turf burns and/or abrasions.









What to Do:

Without proper referral and care, more serious infections may cause pneumonia, bloodstream, bone, and/or joint infections, and/or surgical wound infections. If you or anyone you know has what appears to be what looks like "staph" and/or MRSA, please contact a University of Maryland Team Physician and/or University of Maryland Sports Medicine staff member as soon as possible for evaluation.

Prevention of "Staph" and/or MRSA:

Although treatable, there can be complications associated with "staph" and MRSA infections, making prevention the best measure to combat these infections. The Centers for Disease Control suggest the following measures for preventing staphylococcal skin infections, including MRSA:

- 1. Practice good hand hygiene by washing hands frequently and in a thorough fashion with soap and warm water or using an alcohol-based hand sanitizer.
- 2. Take a shower with hot water and wash with soap (liquid antibacterial soap, not bar soap) following all activities (e.g. strength & conditioning sessions, practices, and competitions).
- 3. Avoid sharing towels, equipment, razors, soap (use liquid soap instead of bar soap), etc.
- 4. Use a barrier (e.g. clothing or a towel) between your skin and shared equipment.
- 5. Wipe surfaces of equipment before and after use.
- 6. Clean and properly cover any open wounds such as turf burns, abrasions, lacerations, etc. with an appropriate bandage at all times.
- 7. Avoid whirlpools, hydrotherapy pools, cold tubs, swimming pools, and other common tubs if you have an open wound.
- 8. Maintain clean facilities and equipment.
- 9. Do not ignore skin infections, pimples, pustules, abscesses, etc. Report these to a Sports Medicine staff member and/or physician immediately.